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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/734,923	12/12/2003	Joe Berry	50345/RVW/V186	2251	
23363 75	10/08/2004		EXAM	EXAMINER	
CHRISTIE, P.	ARKER & HALE, LLP	GAY, JENNIFER HAWKINS			
PO BOX 7068					
PASADENA,	CA 91109-7068		ART UNIT	PAPER NUMBER	
•			3672		
			DATE MAILED: 10/08/200	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

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\(\)	Application No.	Applicant(s)	-the			
	10/734,923	JOE BERRY				
Office Action Summary	Examiner	Art Unit				
	Jennifer H Gay	3672				
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet	t with the correspondence addres	is			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, ma oly within the statutory minimum of will apply and will expire SIX (6) No. c, cause the application to becom	y a reply be timely filed thirty (30) days will be considered timely. MONTHS from the mailing date of this commule ABANDONED (35 U.S.C. § 133).	inication.			
Status						
1) Responsive to communication(s) filed on	<u>_</u> .					
2a) This action is FINAL . 2b) ☑ This	s action is non-final.					
3) Since this application is in condition for allowa	ance except for formal m	natters, prosecution as to the me	erits is			
closed in accordance with the practice under	Ex parte Quayle, 1935 (C.D. 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-37 is/are pending in the application	n.					
4a) Of the above claim(s) is/are withdra	awn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-37</u> is/are rejected.		•				
	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/	or election requirement.					
Application Papers						
9) The specification is objected to by the Examin						
10)⊠ The drawing(s) filed on 12 December 2003 is/	0)⊠ The drawing(s) filed on <u>12 December 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
•	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the E	Examiner. Note the attac	hed Office Action or form PTO-	152.			
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea 	nts have been received. Its have been received it ority documents have be au (PCT Rule 17.2(a)).	n Application No een received in this National Sta	ge			
* See the attached detailed Office action for a lis Attachment(s)	t of the certified copies	not received.				
1) Notice of References Cited (PTO-892)		ew Summary (PTO-413)				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 8/2/04. 	Paper 5) Notice	No(s)/Mail Date of Informal Patent Application (PTO-15	2)			

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DETAILED ACTION

The Preliminary Amendment filed 28 June 2004 has been received and entered.

Drawings

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "38" and reference character "41" has been used to designate both a circle and a device.
- 2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the third pipehandling device as recited in claim 35 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 33 and 34.
- 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

5. The abstract of the disclosure is objected to because the abstract has been constructed a single, run-on sentence instead of a narrative paragraph. Correction is required. See MPEP § 608.01(b).

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

- 7. Claims 6 and 14 are objected to because of the following informalities:
 - > Claim 6 recites the limitation "said gripping device" in line 1. There is insufficient antecedent basis for this limitation in the claim.
 - ➤ In line 24 of claim 14, "a plurality of tubular bodies" should be changed to -- the plurality of tubular bodies--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 1-11, 13-34, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Lund (US 4,850,439).

Regarding claim 1: Lund discloses a system for handling tubular body sections at a drill ring. The system includes the following features:

- ➤ A drill platform 11 having a derrick 10 extending upwards such that the drill platform and derrick form a drilling area.
- A first hoist 12 connected to an upper part of the derrick o passing a tubular body through a drilling opening 18 defined in the drill platform.
- ➤ At least one storage area 31, 32 arranged within the drill area for storing a plurality of tubular lengths where each length includes at least two releasably interconnected tubular body sections.
- At least one preparation opening 21 extending through the drill platform at a location that is spaced from the drill opening and from the at least one storage area.
- A torquing tool 25 for rotatably interconnecting tubular bodies at the at least one preparation opening to form tubular lengths.
- ➤ A first pipehandling device (2:58-3:20) for transporting tubular bodies and tubular lengths from outside the drill area at the at least one preparation opening.
- A second pipehandling device 22 for transporting tubular bodies between the at least one preparation opening, the at least one storage area, and the first hoist.

Regarding claims 2, 7, 25, 30: The first and second pipehandling devices include an axially rotatable vertical strut 26 having at least one gripping device 24 attached thereto.

Regarding claims 3, 26: The at least one gripping device is designed to hoist the tubulars vertically.

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Regarding claims 4, 27: The first and second pipehandling devices include a hoist that is capable of lower in the gripping device outside the drill area to an outside tubular storage area (3:47-51).

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Regarding claims 5, 28: The gripping device includes two vertically aligned gripping devices (Figure 1).

Regarding claims 6, 29: The gripping device is extendable radially outward from the axial center of the pipehandling device (7:3-23).

Regarding claims 8, 9, 31, 32: The torquing tool is an iron roughneck that is rotatable about a vertical axis, the axial center of the pipehandling device, and laterally extendable such that the tool is capable of engaging tubulars at both the drilling opening and the at least one preparation opening.

Regarding claims 10, 33: The at least one storage area is positioned between the drilling opening and the preparation opening.

Regarding claims 11, 34: The system includes two storage areas with the pipehandling devices located between the two areas.

Regarding claims 13, 37: The derrick defines a first access opening 38 through which the pipehandling device may grip tubulars outside the drill area.

Regarding claim 14: Lund further discloses a method for using the above system that involves the following steps (7:47-9:10):

- > Transporting a plurality of tubular bodies from outside the drill area to the preparation opening in a vertical position using the first pipehandling device.
- Forming tubular lengths be releasably interconnecting the plurality of tubular bodies with the torquing tool while one of the bodies extends through the preparation opening and another is suspended by means of the first pipehandling device, and withdrawing the prepared tubular length from the preparation opening using the first device.
- > Transporting the prepared length to the at least one storage area in a vertically position using the second pipehandling device.

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> Transporting tubular lengths form the storage area to the drilling opening in a vertical position using the second device.

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➤ Releasably connecting the tubular lengths to the upper end of a drill stand suspended and successively lower the drill stand through the drilling opening using the first hoist.

Regarding claim 15, 16: The method further involves a third tubular body to be attached to the previous two by holding the first tubular body and a portion of the second tubular body below the drill platform and using the first device to connect the third tubular body to the exposed portion of the second tubular body.

Regarding claim 17: The three tubular bodies may be interconnected by holding the first body in the drilling opening, the second in the preparation opening, and interconnecting the third body to the second. The third and second bodies are then lifted by the first device and interconnected to the first body.

Regarding claims 18, 19: The system may be used to disconnecting the tubular bodies by performing the above steps in reverse.

Regarding claims 20-24: The tubular lengths may be drill pipe, bottomhole assembly parts, well casing, or production tubing and have an axial dimension that corresponds to the inner free height of the derrick.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 12, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lund (US 4,850,439) in view of Berry (US 5,107,940).

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Regarding claims 12, 36: Lund discloses all of the limitations of the above claims except for the system including a tubular ramp for transporting tubulars bodies form a storage area outside the drill area to the drill platform.

Berry discloses a wellbore pipe handling system similar to that of Lund. Berry further teaches a ramp (Figure 1) for transporting tubular bodies from a storage area outside the drill area to the drill platform.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Lund to include a ramp as taught by Berry in order to have provided a means for easily moving horizontal tubulars to a vertical position. This would have allowed a larger number of tubulars to be stored near the system as the storage areas in the derrick itself would have had a limited amount of storage room.

Regarding claim 35: Lund discloses all of the limitations of the above claims except for a third pipehandling device for moving tubulars from an outside storage area to the first pipehandling device.

Berry further teaches a third pipehandling device (4:12-17) for moving tubular bodies from the outside storage area to an internal storage area where the bodies would be picked up by another pipehandling device.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Lund to include a third pipehandling device as taught by Berry in order to have provided a means for easily moving horizontal tubulars to a vertical position while still allowing the other pipehandling devices to be used to interconnect tubular bodies already within the derrick.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references made of record disclose various wellbore tubular handling devices.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tennifer H'Gay Patent Examiner Art Unit 3672

September 27, 2004